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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,286	09/16/2003	Shan-Jang Chen	MR1035-1309	9820
4586	7590	12/16/2004	EXAMINER	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			CHUNG, DANIEL J	
			ART UNIT	PAPER NUMBER
			2672	

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/662,286

**Applicant(s)**

CHEN ET AL.

**Examiner**

Daniel J Chung

**Art Unit**

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Drawings***

The drawings are not objected to by the Examiner.

### ***Specification***

Please review the application and correct all informalities.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fong (US 2003/0095152) in view of Hinton (5,923,407), and further in view of Iizuka et al (US 2002/0168176).

Regarding claim 1, Fong discloses that the claimed feature of a digital photo frame comprising: a storage unit [404,410,412] for storing picture and music data; a digital processing unit [402] for processing picture and music data in storage unit ; a display unit [458] for displaying picture data processed by digital processing unit and [digital outer frame patterns of digital photo frame; a sound reception and playback unit

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used to receive sound and play music and convert the received sound into digital music data through digital processing unit, sound reception and playback unit being also used to store digital music data into storage unit and play music data processed by digital processing unit; a control software stored in storage unit and executed by digital processing unit, control software being used to select a picture to be displayed from storage unit and set a matching music for each picture and automatically play the matching music according to the displayed picture, control software being also used to let a user select digital outer frame pattern of digital photo frame to be displayed;] and a control input unit [416,418] letting a user be capable of operating control software to control digital photo frame, control input unit being composed of at least more than one key [208] located on digital photo frame. (See Fig 4, Abstract, [5-6])

Fong does not specifically disclose that selecting digital outer frame pattern of digital photo frame by user using control software, as recited in claim. However, such limitation is shown in the teaching of Hinton. [i.e. controlling of the image borders] (See Abstract, Fig 2-5, col 1 line 40-60) It would have been obvious to one skilled in the art to incorporate the teaching of Hinton into the teaching of Fong, in order to effectively provide the digital photo frame with fancy effect by user preferences , as such improvement [i.e. controlling picture border] is also advantageously desirable in the teaching of Fong for displaying digital images with image effect in user friendly manner.

Also, the combination of Fong and Hinton do not explicitly disclose that “the sound reception and playback unit used to receive sound and play music” and “control software used to set a matching music for each picture and automatically play the matching music upon the displayed picture”, as recited in claim. However, such limitations are shown in the teaching of Iizuka et al. [i.e. sound/playback units with synchronizing the displayed picture and played music. (See Abstract, Fig 1-2,[2],[5-6],[10-14]) It would have been obvious to one skilled in the art to incorporate the teaching of Iizuka into the teaching of Fong, in order to provide an enhanced display [i.e. aural and visual images] with easy manner, as such improvement is also advantageously desirable in the teaching of Fong for generating improved digital images frame with high degree of the user’s image/photo perception at optimized manner.

Regarding claim 2, Fong discloses that storage unit is a flash memory [412].  
(See Fig 4)

Regarding claims 3-4, Fong does not specifically disclose the memory card access device, as recited in claim. However, utilizing the memory card access device is well known in an analogous art to improve user’s handiness [i.e. portability] for storing data in convenient manner. Therefore, it would have been obvious to one skilled in the

art to include the memory card access device into the system of Fong for improve the user's flexibility for displaying digital photo frame.

Regarding claim 5, Fong discloses that storage unit comprises a read only memory and control software is stored in read only memory [410]. (See Fig 4)

Regarding claim 6, Fong discloses that display unit is a liquid crystal display, a plasma display panel, an organic light emitting device or a field emission device. (See [24])

Regarding claim 7, Fong discloses that sound reception and playback unit is composed of a microphone and a loudspeaker. (See [21-21],[24])

Regarding claim 8, Fong discloses that digital photo frame further comprises an I/O interface [414,420,424,428,450] for file transmission with a computer. (See Fig 4)

Regarding claim 9, Fong discloses that I/O interface is a universal serial bus [430]. (See Fig 4)

Regarding claim 10, Fong does not specifically discloses that music data are of the WAV or MP3 format. However, these music formats have been well known in an analogous art, as such format are commercially available to user in many ways.

Therefore, it would have been obvious to one skill in the art to include the such music format into the system of Fong to represent of sound data.

Regarding claim 11, Fong discloses that picture data are of the JPEG or GIF format. [19]

Regarding claim 12, refer to the discussion for the claim 1 hereinabove, Iizuka et al further discloses that the matching music are digital music data recorded by sound reception and playback unit when displaying different pictures through control software. (See Abstract, Fig 1-2,[2],[5-6],[10-14])

Regarding claim 13, refer to the discussion for the claim 1 hereinabove, Hinton further discloses that a user can select a matching digital outer frame pattern for each picture through control software, and matching digital outer frame patterns can be automatically displayed according to displayed pictures. (See Abstract, Fig 2-5, col 1 line 40-60)

Regarding claim 14, Fong claim 14 is similar in scope to the claim 1, and thus the rejection to claim 1 hereinabove is also applicable to claim 14. In addition, Fong discloses that a clock unit for generating the present time information, which can be displayed through display unit. (See [38])

Regarding claim 15, Fong discloses that clock unit has an alarm clock function, and clock unit can set a specific time for playing music through sound playback unit. (See [38])

Regarding claim 16, Fong discloses that picture data and present time information can be simultaneously displayed on display unit. (See [38]; Also See Abstract, Fig 2-5, col 1 line 40-60 in Hinton)

Regarding claim 17, Hinton discloses that present time information are displayed on digital outer frame pattern to form part of digital outer frame pattern. (See Abstract, Fig 2-5, col 1 line 40-60)

Regarding claim 18, Fong does not explicitly discloses that present time information are displayed in an analog or a digital form. However, representing the time with either an analog or a digital form is well known in the art to improve user's perception, therefore it would have been obvious to one skilled in the art to include these two different form of the time information.

Regarding claim 19, with discussion for the claim 18 hereinabove, Hinton discloses that present time information displayed in an analog form can be displayed above a picture displayed on digital photo frame with displayed picture as the background. (See Abstract, Fig 2-5, col 1 line 40-60)



Regarding claim 20, Fong discloses that digital photo frame further comprises a radio reception unit for selecting a radio channel through control software and playing the radio through sound playback unit. [33]

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

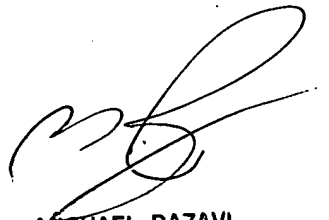
**(703) 872-9306 (Central fax)**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc  
December 8, 2004



MICHAEL RAZAVI  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600